

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Please amend claims 1-7, 9, 13-17 as follows.

STATUS OF CLAIMS

1. (Currently Amended) A vector for amplifying a toxic gene in bacteria comprising:
an origin of replication;
a first promoter;
a polylinker;
a second promoter in reverse orientation with respect to said first promoter;
a polyadenylation signal; and
a nucleic acid molecule having a nucleotide sequence encoding a selectable marker;
wherein said second promoter is capable of producing an antisense molecule directed to said toxic gene, but is silent in a target host in vivo when said toxic gene is inserted into said polylinker of said vector.
2. (Currently Amended) The vector of claim 1 wherein said vector is a plasmid, cosmid, phagemid or viral vector.
3. (Currently Amended) The vector of claim 1 further comprising an enhancer upstream of said first promoter.
4. (Currently Amended) The vector of claim 1 wherein said first promoter is selected from the group consisting of B-cell specific promoter, baculovirus promoter, cytomegalovirus promoter, SV40 early promoter, mouse mammary tumor virus promoter, long terminal repeat of human immunodeficiency virus, maloney virus promoter, Epstein Barr virus promoter, and rous sarcoma virus promoter.

5. (Currently Amended) ~~The vector of claim 1 wherein second promoter is~~ A vector for amplifying a toxic gene in bacteria comprising:

an origin of replication;

a first promoter;

a polylinker;

a lac promoter in reverse orientation with respect to said first promoter;

a polyadenylation signal; and

a nucleic acid molecule having a nucleotide sequence encoding a selectable marker;

wherein said lac promoter is capable of producing an antisense molecule directed to said toxic gene when said toxic gene is inserted into said polylinker of said vector.

6. (Currently Amended) The vector of claim 4 9 wherein said poly A signal is SV40 polyadenylation signal.

7. (Currently Amended) The vector of claim 4 9 wherein said gene encoding a selectable marker is kanamycin, neomycin, chloramphenicol, ampicillin, or a genetic selection marker.

8. (Previously Amended) The vector of claim 3 wherein said enhancer is selected from the group consisting of rous sarcoma virus enhancer, human actin enhancer, human myosin enhancer, human hemoglobin enhancer, human muscle creatine enhancer, viral enhancers, immunoglobulin enhancers, class II enhancers, and enhancers active in dendritic cells and macrophages.

9. (Currently Amended) ~~The vector of claim 1 further comprising~~ A vector for amplifying a toxic gene in bacteria comprising:

an origin of replication;

a first promoter;

a polylinker;

a nucleic acid molecule having a nucleotide sequence encoding a toxic protein, wherein said nucleic acid molecule is inserted within said polylinker and is operably connected to said first promoter;

a second promoter in reverse orientation with respect to said first promoter;

a polyadenylation signal; and
a nucleic acid molecule having a nucleotide sequence encoding a selectable marker;
wherein said second promoter is capable of producing an antisense molecule directed to
said nucleic acid molecule encoding a toxic protein.

10. (Original) The vector of claim 9 wherein said nucleic acid molecule encodes a bacterial toxin or a viral toxin.

11. (Original) The vector of claim 10 wherein said viral toxin is HIV-1 *env*.

12. (Original) The vector of claim 10 wherein said bacterial toxin is selected from the group consisting of Pseudomonas exotoxin A, cholera toxin, diphtheria toxin, *E. coli* toxins, botulinum toxin, anthrax toxin, pertussis toxin, shiga toxin, ricin, tetanus toxin, and Staphylococcal toxins.

13. (Currently Amended) A host cell comprising the vector of claim 4 9.

14. (Currently Amended) ~~The host cell of claim 13 wherein said cell is a~~ A bacteria cell comprising a vector for amplifying a toxic gene in said cell, said vector comprising:

an origin of replication;

a first promoter;

a polylinker;

a second promoter in reverse orientation with respect to said first promoter;

a polyadenylation signal; and

a nucleic acid molecule having a nucleotide sequence encoding a selectable marker;

wherein said second promoter is capable of producing an antisense molecule directed to
said toxic gene when said toxic gene is inserted into said polylinker of said vector.

15. (Currently Amended) ~~The host cell of claim 13 wherein said cell is a~~ A mammalian cell comprising a vector for amplifying a toxic gene in said cell, said vector comprising:

an origin of replication;

a first promoter;

a polylinker;
a second promoter in reverse orientation with respect to said first promoter;
a polyadenylation signal; and
a nucleic acid molecule having a nucleotide sequence encoding a selectable marker;
wherein said second promoter is capable of producing an antisense molecule directed to
said toxic gene when said toxic gene is inserted into said polylinker of said vector.

16. (Currently Amended) A method of amplifying a toxic gene in bacteria comprising the steps:

providing a vector of claim 4 9;

~~inserting the nucleic acid molecule encoding said toxic gene into the polylinker of said vector;~~

inserting said vector comprising said toxic gene into said bacteria; and

amplifying said vector in said bacteria.

17. (Currently Amended) The vector of claim 8 wherein said enhancer is a ~~cytomegalovirus~~ cytomegalovirus enhancer or an Epstein-Barr virus enhancer.